Claims

We claim:

- A method to apply the cloud point system (CPS) in biotransformation, which is
 characterized in that one or more types of nonionic surfactant is selected to form a
 aqueous medium for microbial transformation whose cloud point is below the
 transformation temperature.
- 2. According to Claim 1, a method to apply the CPS in biotransformation, which is characterized in that the nonionic surfactants thereof comprise polyoxyethyene alcohols, polyoxyethylene sorbitan fatty acid esters and alkylphenol ethoxylates.
- 3. According to Claim 2, a method to apply the CPS in biotransformation, which is characterized in that the polyoxyethyene alcohols thereof comprise Brij 30, Brij 35, Brij 56 and C₁₂E₇; the polyoxyethylene sorbitan fatty acid esters thereof comprise Tween 20, Tween 40, Tween 60, Tween 80, Span 20, Span 40, Span 60 and Span 80; the alkylphenol ethoxylates thereof comprise Triton X-100 and Triton X-114.
- 4. According to Claim 1, a method to apply the CPS in biotransformation, which is characterized in that the microbial transformation thereof is the microbial transformation where the substrate is hydrophobic, or microbial growth is inhibited by substrates or products, or product is further degraded by the microbes.